

REMARKS

This paper is filed in response to the Office Action mailed 1st November 2004.

Claims 1- 16 were pending in the application. Claims 1, 6, 7, 9 and 16 have been amended, claims 4 and 8 have been canceled. Therefore, claims 1 - 3, 5 - 7 and 9 - 16 are now pending in the application and are submitted for reconsideration.

Rejection of Claims 1-3, 5, 7, 14 and 16:

Claims 1, 3, 5, 7 and 16 were rejected under 35 U.S.C. § 103(a) as being obvious in view of U.S. Patent No. 3,799,045 issued to Sohlberg in combination with U.S. Patent No. 5,919,406 issued to Bachofen.

In response to these rejections, claims 1, 7 and 16 have been amended to include the feature that the cover layer comprises Portland cement. Basis for this amendment is to be found in particular in original claims 4 and 8.

According to Sohlberg, the exchanger fill of the prior art device comprises corrugated layers impregnated with a hygroscopic substance. The device is intended to adsorb moisture from outgoing air and subsequently release it to incoming air. For this purpose hygroscopic substances are employed. According to the Sohlberg, the regenerative heat exchanger may be used in combination with a carbon filter. The paragraph referenced by the Examiner (column 4, lines 27 to 37) indicates that the separate carbon filter 34 may be used with other forms of heat exchanger. It does not thus disclose a heat exchange membrane having a hydrophilic cover layer having little or no hygroscopic action.

It is also noted that Sohlberg describes a regenerative heat exchanger in which bulk flow takes place in a first direction through a whole sector of the exchanger (see the sectors in Fig 2 and the flows 18 and 20 in Fig 1). This device is not intended to operate by heat exchange across a membrane and no such mutual heat exchange between two flows is understood to occur. Referring to Fig 2, the flow on either side of a sheet 12 or 14 will be the same, and thus enthalpy exchange only takes place from the flows to the sheet i.e. the sheet adsorbs energy by capturing moisture for subsequent release.

The presently amended claims now specifically refer to the presence of Portland cement in the coating. The particular physical structure of such compositions has been found extremely efficient in storing liquid while allowing ease of subsequent evaporation. Applicants respectfully submit that nothing in the art of record teaches or suggests the present

invention. In particular, the Examiner has given no indication in the cited Bachofen reference to suggest that a cover layer of Portland cement could be used in the present context.

Claims 2, 3, 5 and 14 depend from claim 1 and are thus patentable on that basis. In view of the above, Applicants respectfully request withdrawal of the rejections and allowance of claims 1 - 3, 5, 7 and 16.

Objections to Claims 6, 9 - 13 and 15 :

Claims 4, 6, 8 – 13 and 15 were objected to as being dependent on a rejected base claim. The Examiner indicated that these claims would be allowable if amended to incorporate the limitations of the rejected base claim and any intervening claims. In view of the present amendments, Applicants respectfully request withdrawal of the objections and allowance of these claims.

Any extension of time that may be deemed necessary to further the prosecution of this application is hereby requested. The Commissioner is authorized to charge any additional

invention. In particular, the Examiner has given no indication in the cited Bachofen reference to suggest that a cover layer of Portland cement could be used in the present context.

Claims 2, 3, 5 and 14 depend from claim 1 and are thus patentable on that basis. In view of the above, Applicants respectfully request withdrawal of the rejections and allowance of claims 1 - 3, 5, 7 and 16.

Objections to Claims 6, 9 - 13 and 15 :

Claims 4, 6, 8 - 13 and 15 were objected to as being dependent on a rejected base claim. The Examiner indicated that these claims would be allowable if amended to incorporate the limitations of the rejected base claim and any intervening claims. In view of the present amendments, Applicants respectfully request withdrawal of the objections and allowance of these claims.

Any extension of time that may be deemed necessary to further the prosecution of this application is hereby requested. The Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment, to Deposit Account No. 08-3038, referencing the docket number shown above.

The Examiner is respectfully requested to contact the undersigned by telephone at the number given below in order to resolve any questions.

Respectfully submitted,

Jacobus C. Rasser

Jacobus C. Rasser

Reg. No. 37,043

Date:

January 24, 2005

Customer No. 32,894

Howrey Simon Arnold & White

2941 Fairview Park Drive, Suite 200

Falls Church, VA 22042

Fax: 202 383-7195

Tel: 9-011-31-20-5924411